

WHAT IS CLAIMED IS:

1. A rotary movement converting mechanism for converting a rotary movement into a linear movement, comprising:
 - 5 a rotary body having a spiral groove on the inner circumference thereof;
 - a movable body;
 - a body frame;
 - an approximately cylindrical support body fixed to the body frame and provided with a slit along an axial direction of the rotary body;
 - 10 a top member provided to the movable body, an engaging member of the top member being inserted through the slit so that a tip end of the engaging member is engaged with the spiral groove; and
 - a stop member that stops a linear movement of the movable body when a load is applied on the linear movement of the movable body.
- 15 2. The rotary movement converting mechanism according to claim 1, wherein the stop member is a stick member that advances toward the inner circumference of the support body when the load is applied on the linear movement of the movable body.
- 20 3. The rotary movement converting mechanism according to claim 2, wherein the top member is capable of turning around an axis extending in a direction orthogonal to the axial direction of the rotary body, and
wherein the stop member advances in accordance with the turning movement of the top member.
- 25 4. The rotary movement converting mechanism according to claim 1,
wherein the top member is capable of turning around an axis extending in a direction orthogonal to the axial direction of the rotary body, and
wherein the stop member is engaged with the top member and the movable body
30 and is pressed toward the inner circumference of the support body in accordance with the turning movement of the top member when the load is applied on the linear movement of the movable body.

5. The rotary movement converting mechanism according to claim 4, wherein the stop member is disposed on a side of the top member opposite to a side of the top member on which the engaging member is provided relative to the axial center of the movable body and is moved in a direction opposite to the moving direction of the movable body by the turning movement of the top member.
6. The rotary movement converting mechanism according to claim 4, wherein the stop member is disposed between the movable body and the support body and is provided with a tapered portion engaged with the top member on a first end thereof and projected in an out-plane direction toward a second end, and wherein an end of the movable body is abutted to the tapered portion.
7. The rotary movement converting mechanism according to claim 3, wherein a spring for biasing the top member in a direction for preventing the turning movement of the top member is disposed between the movable body and the top member.
8. A measuring instrument for measuring a displacement in a linear direction, comprising: a rotary movement converting mechanism according to claim 1, wherein the movable body is a spindle advanceable and retractable relative to the body frame, the support body is an inner sleeve having an end fixed to the body frame, and the rotary body is an outer sleeve.